All 5-speed Sportster gears are made from high nickel alloy steel. Gears are then heat treated and shot peened to give maximum durability and strength. Also, where applicable, drive dogs have milled lead-in ramps to improve shifting and reduce wear on drive dogs and slots.

### A 2.61 Close Ratio 1st Gear Set
(2 pieces) 2.61 1st gears provide true close ratio shifting into 2nd gear plus 7 MPH of usable 1st gear. 
(20T & 30T)  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  Part# 299110

### B Stock 2nd and 3rd Gears
(2nd main and 3rd counter) (H/D #35771-89) (24T)  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  Part# 299102
(3rd main and 2nd counter) (H/D #35772-89) (28T)  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  Part# 299103

### C Stock 4th Gears
(4th main gear) (H/D #35773-89) (30T)  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  Part# 299104
(4th counter gear) (H/D #35775-89) (21T)  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  Part# 299144

### D Stock Main Drive Gears
(Main drive) (H/D #35034-89) (33T)  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  Part# 299105
(Counter drive gear) (H/D #35633-89) (19T)  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  Part# 299155

### E Transmission Mainshaft
(Mainshaft) (H/D #35640-89)  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  Part# 299180

### F Transmission Countershaft
(Countershaft) (H/D #35641-89)  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  Part# 299170

### EV Sportster 5-Speed Gear Sets
(1991–2003) (Later years have differences)  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  Part# 299900

2004 and later Sportsters cannot use many of the earlier years gears. 5-speed EV Sportster transmission gear sets are available as complete kits. Each kit includes the parts as shown: 1st, 2nd, 3rd, 4th, 5th gears, mainshaft, and countershaft.

### Special Ratio Sportster 5-Speed Racing Gears

#### S Ratio Gears (1st and 2nd)
(2 gears) 2.368 1st gears. (22T & 30T)  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  Part# 299816
(2 gears) 1.876 2nd gears. (25T & 27T)  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  Part# 299724

#### Y Ratio Gears (1st, 2nd, 3rd, 4th)
(2 gears) 2.026 1st gears. (24T & 28T)  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  Part# 299717
(2 gears) 1.670 2nd gears. (25T & 26T)  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  Part# 299727
(2 gears) 1.364 3rd gears. (22T & 28T)  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  Part# 299737
(2 gears) 1.158 4th gears. (20T & 30T)  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  Part# 299747

### Internal Transmission Ratios

<table>
<thead>
<tr>
<th>Gear</th>
<th>S Ratio</th>
<th>% Change</th>
<th>Y Ratio</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st</td>
<td>2.368</td>
<td>21%</td>
<td>2.026</td>
<td>17%</td>
</tr>
<tr>
<td>2nd</td>
<td>1.876</td>
<td>18%</td>
<td>1.670</td>
<td>15%</td>
</tr>
<tr>
<td>3rd</td>
<td>1.489</td>
<td>18%</td>
<td>1.364</td>
<td>14%</td>
</tr>
<tr>
<td>4th</td>
<td>1.216</td>
<td>18%</td>
<td>1.158</td>
<td>14%</td>
</tr>
<tr>
<td>5th</td>
<td>1.000</td>
<td>18%</td>
<td>1.000</td>
<td>15%</td>
</tr>
</tbody>
</table>

Note: Ratio “S” includes 1st and 2nd gears (4 piece set).
Ratio “Y” includes 1st, 2nd, 3rd and 4th (8 piece set).